

**Application No.:** 10/828,793  
**Filing Date:** April 20, 2004

### AMENDMENTS TO THE CLAIMS

1. (Canceled).

2. (Canceled).

3. (Canceled).

4. (Canceled).

5. (Canceled).

6. (Previously presented) An automated diagnostic system for use in a computing environment, the system comprising:

a processor configured to implement a plurality of objects which, when executed by the processor, interact to determine a diagnosis of a patient, wherein the objects include at least two of: a disease object, a symptom object, a valuator object, a question object, a node object and a candidates object; and

a digital storage device for storing the plurality of objects and the corresponding data and processes for each object, and wherein the data is encapsulated so that other objects only see the processes of a particular object that can be invoked to access the data.

7. (Original) The system of Claim 6, wherein the objects include a plurality of disease objects and a plurality of symptom objects.

8. (Original) The system of Claim 6, additionally comprising an engine object to coordinate the other objects.

9. (Canceled)

10. (Previously presented) The system of Claim 6, wherein the objects are arranged in a hierarchical relationship such that the result of one of the objects is input to another of the objects.

11. (Previously presented) The system of Claim 6, wherein the objects include a disease object, a symptom object, a valuator object, a question object, a node object and a candidates object.

12. (Previously presented) The system of Claim 11, wherein the symptom object invokes the valuator object.

13. (Previously presented) The system of Claim 11, wherein the valuator object invokes the question object.

14. (Previously presented) The system of Claim 11, wherein the question object invokes the node object.

15. (Withdrawn) The system of Claim 6, wherein a particular disease is associated with a plurality of disease objects corresponding to different phases of the particular disease.

16. (Previously presented) The system of Claim 6, wherein a particular disease is associated with a plurality of disease objects corresponding to different populations for the particular disease.

17. (Previously presented) The system of Claim 6, wherein a particular disease object is representative of a plurality of related diseases that share common symptoms.

18. (Previously presented) The system of Claim 6, wherein once an object is invoked, the object acts independently of other objects and a particular object retains a record of its actions for future reference.

19. (Canceled).

20. (Previously presented) The system of Claim 6, wherein a particular disease object monitors the questions and answers of other disease objects.

21. (Previously presented) The system of Claim 8, wherein the engine object coordinates a plurality of concurrently operating disease objects by switching execution among the disease objects.

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Canceled)

30. (Canceled)

31. (Canceled)

32. (Canceled)

33. (Canceled)

34. (Canceled)

35. (Previously presented) The system of Claim 6, wherein the disease object directly invokes another disease object.

36. (Withdrawn) The system of Claim 6, wherein the disease object directly invokes the symptom object.

37. (Previously presented) The system of Claim 6, wherein each object has at least constant data.

38. (Previously presented) The system of Claim 6, wherein at least one of the disease object and the symptom object has variable data.

39. (Withdrawn) The system of Claim 7, wherein each disease object is associated with one disease.

40. (Previously presented) The system of Claim 7, wherein each disease object is associated with a phase of one disease.

41. (Withdrawn) The system of Claim 7, wherein each symptom object is associated with one symptom.

42. (Previously presented) The system of Claim 7, wherein each symptom object is associated with a sub-symptom of one symptom.

43. (New) The system of Claim 6, wherein the data for each object is encapsulated so that the data is hidden.

44. (New) An automated diagnostic system for use in a computing environment, the system comprising:

a processor configured to implement a plurality of objects which, when executed by the processor, interact to determine a diagnosis of a patient, wherein the objects include at least two of a disease object, a symptom object, a valuator object, a question object, a node object, and a candidates object, wherein each object has a data structure and one or more associated processes to manipulate data in the data structure; and

a digital storage device for storing the plurality of objects, wherein the data of each object is encapsulated so that the data is hidden and other objects only see the processes of a particular object that can be invoked to access the data.

45. (New) The system of Claim 44, wherein the objects are arranged in a hierarchical relationship such that the result of one of the objects is input to another of the objects.

46. (New) The system of Claim 44, wherein the objects include a plurality of disease objects and a plurality of symptom objects.

47. (New) The system of Claim 44, wherein the objects include a disease object, a symptom object, a valuator object, a question object, a node object and a candidates object, wherein the symptom object invokes the valuator object.

48. (New) The system of Claim 44, wherein a particular disease is associated with a plurality of disease objects corresponding to different phases of the particular disease.

49. (New) The system of Claim 44, wherein a particular disease is associated with a plurality of disease objects corresponding to different populations for the particular disease.

50. (New) An automated diagnostic system for use in a computing environment, the system comprising:

a processor configured to implement a plurality of objects which, when executed by the processor, interact to determine a diagnosis of a patient, wherein the objects include at least two of a disease object, a symptom object, a valuator object, a question object, a node object and a candidates object, wherein each object has a data structure, and wherein each object has one or more functions that belong to the object and that can be accessed from outside of the object; and

a digital storage device for storing the plurality of objects, wherein data of each object is encapsulated so that the data is hidden and other objects only see the functions of a particular object that can be invoked to access the data.

51. (New) The system of Claim 50, wherein the objects are arranged in a hierarchical relationship such that the result of one of the objects is input to another of the objects.

52. (New) The system of Claim 50, wherein the objects include a plurality of disease objects and a plurality of symptom objects.

53. (New) The system of Claim 50, wherein the objects include a disease object, a symptom object, a valuator object, a question object, a node object and a candidates object.

54. (New) The system of Claim 50, wherein a particular disease object is representative of a plurality of related diseases that share common symptoms.

55. (New) The system of Claim 50, wherein the disease object directly invokes another disease object.